

FINDING OF NO SIGNIFICANT IMPACT
Aerial Operations Plan
Lake Mead National Recreation Area
Grand Canyon-Parashant National Monument
Clark County, Nevada
Mohave County, Arizona

INTRODUCTION

The National Park Service (NPS) at Lake Mead National Recreation Area (NRA), the NPS portion of Grand Canyon-Parashant National Monument (NM), and its cooperating agencies, including the Nevada Department of Wildlife (NDOW), Arizona Game and Fish Department (AGFD), the Bureau of Reclamation (BOR), and the Bureau of Land Management (BLM), propose to utilize fixed-wing and helicopter flights for a variety of essential functions. These functions include law-enforcement patrols, wildlife monitoring and capture operations, delivery of supplies and equipment to project sites, and maintenance on radio towers in the backcountry and on adjacent lands. Some of these operations would occur over or within designated, suitable, or potential wilderness areas within the recreation area. An environmental assessment (EA), with a wilderness minimum requirement analysis, has been prepared to determine what is appropriate in wilderness, and to evaluate the effects of aerial operations over and within wilderness areas. A similar document was prepared by the NPS to cover activities occurring in 2004. No major issues or public concerns were raised during review of the EA or subsequently as the operations were carried out. Accordingly, the current EA and Finding of No Significant Impact will serve as the interim management document until a wilderness management plan for Lake Mead NRA is completed.

PURPOSE AND NEED

The NPS, either alone or in partnership with cooperating agencies, conducts aerial operations for several essential management activities within Lake Mead NRA and the Lake Mead NRA portion of the Grand Canyon-Parashant NM. These operations often occur within designated, suitable, and potential wilderness areas within both parks. Prior to 2004, the evaluation of flights in wilderness was conducted on a case-by-case basis. However, due to the potential for cumulative effects, and to allow for more comprehensive project planning and public notification, an EA was prepared to address the overall plan for aerial operations beginning in 2005 through such time as a wilderness management plan can be completed.

Aerial operations are proposed as a necessary component of the following types of activities:

1. Patrols, including wilderness monitoring
2. Repair and maintenance of existing radio towers
3. Wildlife surveys, monitoring, and management activities
4. Natural resource management projects related to habitat restoration and visitor protection

The underlying purpose of these projects is to provide for visitor and employee safety and health, to manage wildlife populations, and to monitor, rehabilitate and preserve wilderness resources within the context of the laws, regulations, and policies governing park management

(see “Related Laws, Policies and Other Planning Documents,” below). The proposed helicopter and fixed-wing flights would allow park staff and cooperators to accomplish these projects in a safe, timely, and efficient manner. The need for such projects is indicated in the Lake Mead NRA General Management Plan, Resource Management Plan, and Strategic Plan.

The EA did not evaluate the use of aerial operations related to emergency services such as fire and search and rescue. A fire management plan was prepared for the recreation area and considered the wilderness minimum requirements for fire management activities. Search and rescue involving the health and safety of persons in wilderness areas are evaluated on a case-by-case basis and are conducted in accordance with all applicable regulations, policies, and guidelines for emergency responses, including the minimum requirement protocols as practicable.

The EA evaluated the no action alternative and one action alternative. The alternatives analyzed were: Alternative A: No action; and, Alternative B: Conduct Administrative Helicopter and Fixed-Wing Flights. The document also included discussions of alternatives that have been ruled out and justifications for their elimination. The document serves as the minimum requirement analysis for activities proposed in wilderness areas (see Appendix A of the EA).

ALTERNATIVES CONSIDERED

The EA evaluated the effects of the no action alternative (Alternative A), and the National Park Service preferred alternative to Conduct Administrative Helicopter and Fixed-Wing Flights (Alternative B). The EA included a minimum requirement analysis for activities proposed in Wilderness areas.

Alternative A- No Action Alternative

Under the no action alternative, no new aerial operations would be permitted to occur over wilderness areas until completion of a wilderness management plan, which may or may not amend interim management decisions. No fixed-wing patrols would occur over wilderness. Other methods for access and the transportation of materials would be considered for each management action under this alternative. This alternative does not meet the project objectives to provide for visitor and employee health and safety, to protect sensitive resources, to manage wildlife populations, and to monitor, rehabilitate, and preserve wilderness resources within the context of the laws, regulations, and policies governing park management.

Alternative B is the management-preferred alternative. The preferred alternative constitutes the proposed action.

Alternative B- Conduct Administrative Helicopter and Fixed-Wing Flights (Management Preferred Alternative)

Continue Fixed-Wing Aerial Patrols (2 flights per week/maximum 104 flights per year, excluding emergencies)

Fixed-wing aerial patrols are conducted by the NPS Park Pilot at least two times a week, in accordance with the Lake Mead NRA Aerial Operations Plan. The purposes of the flights are

routine law enforcement patrol, backcountry patrol, damage assessments, employee transport, search and rescue, boat counts, employee orientation flights, wildlife monitoring, and special request flights. These flights are primarily 800 to 1,000 feet above ground level, though they could go as low as 700 feet above ground level for optimum viewing.

In addition, AGFD also performs fixed-wing aerial patrols 5-10 times per year with the purpose of identifying violations of state law including illegal hunting and off-road driving. These flights temporarily pass over NPS proposed wilderness, with a duration less than 15-20 minutes, and at an altitude of approximately 700 feet. Lower levels are used at times when needed for better identification of violations.

Radio Tower Maintenance (2 flights per site per year/ maximum 8 flights per year total)

Communication among park personnel is considered a priority for the park for safety and emergency services. When there is a need to repair radio towers and replace tower batteries, this work must be completed immediately. NPS radio towers require routine maintenance and servicing. On average, each radio tower is serviced twice a year, unless emergency maintenance is required.

The radio towers are located at Mount Wilson, Grand Wash, Mount Perkins, and Virgin Mountain. The Mount Wilson repeater is the only site located within suitable wilderness on Mount Wilson, Arizona. All other sites are located outside wilderness, and can be accessed without flying over designated or suitable wilderness. The Grand Wash repeater is located outside the recreation area in the Arizona Strip portion of Grand Canyon-Parashant National Monument outside of wilderness. The Mount Perkins repeater is located outside of wilderness in the Black Mountains, Arizona, on Bureau of Land Management administered lands. The Virgin Mountain repeater is located outside the recreation area, outside of wilderness, near Virgin Peak within Bureau of Land Management administered lands.

Wildlife Surveys, Monitoring, and Removal

Burro and Horse Management Activities

Burro management within Lake Mead NRA is authorized under the 1995 Burro Management Plan and Environmental Impact Statement. This alternative includes only the aerial portion of burro management, and does not include any modifications to the existing program within the recreation area. Under this alternative, burro management activities would include aerial helicopter census, capture and removal of burros, and capture and sterilization activities.

In census operations, burros are located from a helicopter flying grid patterns over relatively flat country and following contours in canyons and more mountainous terrain. The helicopter flies at 200 to 500 feet above ground level in a predetermined grid in order to maintain a reliable sighting rate and to ensure the statistical accuracy of the population estimate. Flight speed is 40 to 60 miles per hour (mph). GPS locations are recorded for each animal, and a line feature is recorded to document the actual flight pattern flown.

Burro capture and removal activities are generally planned based on census and utilization data and occur in areas heavily impacted by burros, areas where zero burro use is the recreation area's goal under the approved Burro Management Plan, or areas where they are posing a nuisance or risk to public safety. In removal operations, a helicopter searches for burros, flying at approximately 700 feet above ground level. Once burros are found, a group is herded by the helicopter toward a trap site. While herding, the helicopter is generally flying between 200 feet and 500 feet above ground level. The search periods can take as little as 30 minutes to as long as 2 hours. Once burros are located, the herding period depends on the distance to the trap. Burros are generally herded no more than 4 miles to a trap site, and no faster than 10 miles per hour. Operations can be completed in as little as several hours, to as long as five days, depending on the weather, the size of the removal area, and the number of burros to be removed.

Horse management activities are conducted in cooperation with the BLM on an as-needed basis for trespass horses and when range conditions warrant removals. These operations occur in conjunction with burro management activities.

Desert Bighorn Sheep Management Activities, Nevada

Under this alternative, NPS and joint partnership activities with Nevada Department of Wildlife for bighorn sheep management would include aerial helicopter surveys, affixing telemetry collars for scientific study and, if determined appropriate, capture and relocation of selected bighorn sheep. Activities may also include the removal of trespass or escaped exotic species, such as domestic goats or sheep, which pose a threat to bighorn. Survey activities involve several hours of helicopter flight time at low elevations, frequently 200 feet above ground level or lower for the purpose of conducting a routine annual census of desert bighorn sheep populations. Population estimates and demographic data collected would be used to set sustainable harvest quotas and inform managers of current herd conditions and trends. Historically such operations rarely exceed one day of activity annually over any given mountain range or wilderness unit.

Desert Bighorn Sheep Management Activities, Arizona

This program is similar to the Nevada Desert Bighorn Sheep management program. NPS in joint partnership operations with AGFD actively manage bighorn sheep on park lands. Low-level fixed wing and helicopter flights can occur for annual surveys, transplant, capture and release programs, removal activities, post release monitoring, population demographic studies, and scientific research. Survey activity includes low level helicopter flights, frequently 200 feet or less, approximately 3 to 5 days per year in the Tassi, Grand Wash, the Cockscomb, and Andrus Canyon areas of Grand Canyon-Parashant NM. Scientific research and post release monitoring activities could result in low-level fixed wing and helicopter flights 1 to 3 times per week during the study period. In addition, the level of activity historically includes aerial census for approximately 1 to 2 weeks in the Black Mountains and Temple Bar areas, Arizona, during the late summer and fall, and low level helicopter flights are used to conduct these operations.

Native Fish Monitoring

Between January and May, the Native Fish Work Group, which includes representatives from the NPS, Bureau of Reclamation, Nevada Department of Wildlife, Arizona Game and Fish Department, U.S. Fish and Wildlife Service, the U.S. Geological Survey, and Arizona State University, conduct helicopter surveys of the coves along Lake Mohave and Lake Mead to determine the presence of spawning razorback suckers. The flights primarily occur outside the wilderness areas and follow the shoreline of the lakes.

Flights generally occur at or below 500 feet above ground level. Lake Mohave flights follow the west shoreline from Hoover Dam south to Davis Dam, then follow the east shoreline north from Davis Dam, or vice versa. Northern sections of the surveys include Black Canyon, and the flights could occur over designated wilderness due to the nature of the terrain. Flights take approximately 2 to 3 hours each.

Fish surveys also occur periodically on Lake Mead, though not as frequently as on Lake Mohave. These flights are generally over the lake and not within the wilderness units.

Raptor Surveys

During April and May of 2006, NDOW would use a helicopter to survey for nesting raptors in the Muddy, Black, River, Eldorado, and Newberry Mountains. The estimated total survey time would be 20 to 24 hours. There would be no landing in wilderness areas except in an emergency.

Resource Management Activities

Resource management activities that occur in remote locations of the park sometimes require the use of helicopters to haul equipment to and from the project site. Under this alternative, helicopters would be used to haul heavy equipment into areas with rugged terrain and no road access. Typical projects would include spring restoration (including tamarisk removal and native replanting) and mine closures and restoration. Aerial photographic documentation may also occur on some projects.

Additional Proposed Aerial Operations on the Grand Canyon-Parashant NM portion of Lake Mead NRAWildlife Monitoring

The Arizona Game and Fish Department conducts deer surveys approximately 2 to 4 days per year utilizing low level helicopters on the Shivwits portion of the national monument. Deer surveys normally occur annually in December or January over Twin Point and the Mt. Dellenbaugh areas. These flights typically utilize a low-level helicopter but could be also utilize a fixed-wing aircraft, depending on available funding.

Aerial patrols utilizing both fixed-wing and helicopters occur over the wildlife water catchments at Paws Pocket and Mollies Nipple to monitor wildlife and water conditions.

General Resource Monitoring

There are occasional overflights scheduled over Ponderosa pine forests to look for evidence of bark beetle infestation. This occurs 1 to 2 days per year.

Wilderness monitoring surveys occur 2 to 3 times per year in fixed-wing aircraft at or above 700 feet, but are generally 800 to 1,000 above ground level.

Surveys to monitor range activities, including overflights to look for trespass cattle, can occur 4 to 5 times per year and generally occur in the Grand Wash and Tassi areas in a fixed-wing aircraft at or above 700 feet, but are generally 800 to 1,000 above ground level.

NPS and BLM law enforcement monitoring flights and orientation flights occur approximately 2 to 3 times per year in fixed-wing aircraft at or above 700 feet, but are generally 800 to 1,000 above ground level.

AGFD fixed-wing aerial patrols occur 5-10 times per year, at various times, with the purpose of identifying violations of state law including illegal hunting and off-road driving. These flights temporarily pass over NPS proposed wilderness, with a duration less than 15-20 minutes, and at an altitude of approximately 700 feet. Lower levels are used at times when needed for better identification of violations.

SELECTED ALTERNATIVE

The National Park Service selected alternative is alternative B, conducting administrative helicopter and fixed-wing flights. This alternative is the same as presented in the EA. The administrative flights would accomplish essential patrol functions, including wilderness monitoring; repair and maintain existing radio towers; wildlife monitoring and capture and removal activities; native fish aerial surveys; raptor aerial surveys; spring restoration work; and mine closures and restoration. Alternative B meets the project objectives to provide for visitor and employee health and safety, to protect sensitive resources, to manage wildlife populations, and to monitor, rehabilitate, and preserve wilderness resources within the context of the laws, regulations, and policies governing park management.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

As noted in the EA, an alternative must meet the following criteria to be considered an “environmentally preferred” alternative:

1. Fulfill the responsibilities of each generation as a trustee of the environment for succeeding generations.
2. Ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, whenever possible, an environment that supports diversity and variety of individual choice.

5. Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Based on the above criteria, the “environmentally preferred” alternative was identified in the EA as the proposed action. Alternative B best realizes criteria 1,2,3,4, and 5. Alternative B would assure for all generations a safe, healthful, and esthetically pleasing surrounding. Wildlife management and monitoring activities would be accomplished within the recreation area. Wildlife populations are an essential part of the wilderness resource, and their presence is critical to maintaining an unimpaired wilderness character. Implementation of wildlife sheep management activities would help preserve important natural aspects of our national heritage and would maintain an environment that supports diversity and variety of individual choice. It would allow park managers to achieve a balance between population and resource use, and permit high standards of living and a wide sharing of life's amenities. Alternative B fulfills the responsibilities of each generation as trustee of the environment for future generations, it ensures a safe and healthful environment, and attains beneficial uses of the environment without degradation, risk of health or safety, or other undesirable consequences.

Alternative A (no action) represents continuation of the existing condition (no new aerial operations would be permitted to occur over wilderness areas). No fixed-wing patrols would occur over wilderness. Other options for access and the transportation of materials would be considered for each management action under this alternative, including access by foot, horse or other pack animal, boat, or by vehicle where roads are present. However, these options would not allow managers to fully meet all essential survey and monitoring objectives. The no-action alternative does not fully realize criteria 1, 2, 3, 4, and 5.

MITIGATION, MONITORING, AND OPERATIONS SAFETY

Mitigation measures have been incorporated into the selected alternative to minimize, reduce, or eliminate impacts of alternatives and to protect Lake Mead NRA and Grand Canyon-Parashant NM resources and visitors; including mitigation related to aerial operations and use. Monitoring activities have been incorporated into the selected alternative and will be implemented during or following the project. If planned activities, as detailed in the EA, do not accomplish important objectives, additional environmental compliance may subsequently need to be completed.

The following table describes mitigation measures and monitoring activities that will be implemented.

IMPACT/MITIGATION MATRIX

Impact Topic	Mitigation Measure	Responsibility
Visual Resources	<ul style="list-style-type: none"> ▪ All helicopter operations, other than those for wildlife and burro censusing and removals, will fly at a minimum of 500 feet above ground level except when landing or taking off, or when delivering supplies on a long-line. ▪ Fixed-wing aircraft will fly at a minimum of 700 feet above ground level. Short duration flights at lower altitudes may be used for identification of wildlife or illegal activities. 	Project Manager
Wildlife, Wildlife Habitat, and Sensitive Species of Concern	<ul style="list-style-type: none"> ▪ Low level aerial operations (below 700 feet above ground level) will not occur during sensitive periods for species of concern, as recommended by the NPS wildlife biologist. Sensitive periods for bighorn sheep include the peak mating period between July 1 and September 30 and the lambing period in February and March. Low level census and capture operations will avoid these periods to the extent practicable; limited activity may occur when needed to meet management goals. ▪ If California condors are in the area, aircraft will be kept at least 400 meters from the birds when in the air or on the ground unless safety concerns override this restriction. Aircraft will move away from airborne condors to the extent possible, as long as this action does not jeopardize safety. 	Project Manager and NPS Project Liaison

Impact Topic	Mitigation Measure	Responsibility
Safety	<ul style="list-style-type: none"> ▪ A separate job safety analysis will be prepared for all aerial operations. All aerial operations will be conducted in accordance with applicable state and federal laws and policies. Only qualified and trained individuals will be permitted on the aerial operations. ▪ A flight manager will be assigned to all aerial operations to ensure that conditions are met, safety is observed, and sensitive areas are avoided. ▪ For radio tower maintenance activities, only designated helicopter landing areas will be utilized, except for in emergency situations. 	Project Manager and NPS Project Liaison
Visitor Experience and Wilderness Character	<ul style="list-style-type: none"> ▪ Whenever possible, trap sites will be located outside of wilderness areas, near existing roads and developed areas, adjacent to the lake, or in desert washes or previously disturbed areas. ▪ If possible, aerial trapping operations will be scheduled during periods of low visitor use in wilderness areas. ▪ Notification of aerial operations over wilderness will be provided to the public through the park web site, press releases, and at the park visitor centers. The base of operations will be located outside wilderness. All ground support vehicles will be restricted to existing access roads, outside of the designated wilderness. ▪ Monitoring activities for wilderness have been funded through the Conservation Initiative of the Southern Nevada Public Lands Management Act. Monitoring activities will include assessments of trail impacts from off-road vehicle use. Development of a wilderness management plan has been funded and will be initiated in 2005. 	Project Manager, NPS Project Liaison, and NPS Wilderness Coordinator

ENVIRONMENTAL CONSEQUENCES OF THE SELECTED ALTERNATIVE

Wildlife, Wildlife Habitat, and Sensitive Species of Concern

Law enforcement patrols: Fixed wing law-enforcement patrols utilizing a single propeller Cessna fixed wing airplane occur a minimum of twice weekly and are generally at 800 to 1,000 feet above ground level. If suspicious activities or close inspection warrants, the plane will go no lower than 700 feet above ground level and can circle an individual area for 5 to 20 minutes, depending on the situation. These flights are parkwide, but spend a minimal amount of time over each location. Since they are at a higher altitude, they generally do not disrupt wildlife activities or habitat and create no to negligible impacts.

Radio tower maintenance: Radio tower maintenance activities would utilize a helicopter to transport personnel and supplies to each radio site, as specified under the preferred alternative. Landing and taking off on site would create the most impact, since flights to and from the site are generally at least 800 feet above ground level. Landing and taking off at sites could temporarily disrupt wildlife in that area through noise disturbance and displacement from habitat. All sites are on or near mountain peaks, and if desert bighorn sheep are present, they avoid landing at the site and find an alternative location to land where disruption would not occur. Therefore, there would be negligible to minor impacts to wildlife from this activity.

Wildlife monitoring and capture operations: Low level flights (helicopter or fixed wing) have the potential to displace and/or disrupt normal behavior patterns of wildlife, such as deer and bighorn sheep. Wildlife in the immediate location of flights and where landing would occur would be disrupted and temporarily displaced to available habitat nearby. Implementation of the selected alternative would result in localized, short-term, minor adverse impacts since flight response behavior is expected without interference with activities necessary for survival. Activities that occur during the winter months near the lakeshore may cause temporary minor disturbances to federally protected bald eagles, but these effects would not interfere with activities necessary for survival. There would be no effect to reproduction, as bald eagles are not known to nest in the project area.

Under the selected alternative, resource management activities would be implemented and information would be available for sound management practices and decision-making.

Depending on aerial survey results, individuals from bighorn sheep herds may be captured and transplanted to aid in recovery of bighorn herds elsewhere. Bighorn sheep captures and transplanting would help restore populations to their optimal levels and aid in sustainability and diversity of the herd. Desert bighorn sheep would be directly disturbed if they are captured and tagged, and/or relocated. Mitigation should prevent major impacts to individual sheep. However, there is the possibility that the capture operation or relocation could lead to direct mortality of individual sheep. Desert bighorn sheep management activities would result in long-term beneficial effects to bighorn populations.

Resource Management Activities: Utilizing a helicopter to sling-load supplies would occur on the first and last days of the project. The helicopter may remain on site in case of medical

emergency. The sling-load operation would create minor, temporary disturbance to wildlife (possibly including bald eagles depending on location and time of year) in and adjacent to the project area from noise and displacement from habitat, primarily when the helicopter takes off and lands.

Operations on the Grand Canyon-Parashant NM: Aerial operations and monitoring activities could temporarily disrupt wildlife, including the federally protected California condor, in the vicinity of the flights, particularly the low-level helicopter flights utilized for wildlife monitoring. Other monitoring flights are generally at or above 800 feet above ground level, are infrequent, and create temporary, negligible to minor adverse impacts to wildlife species.

Cumulative Effects: Wildlife are currently disturbed and their normal activities can be disrupted by low-level flights over Lake Mead NRA, particularly low-level helicopter flights. This could continue in the near future. The proposed action would contribute negligibly to the cumulative impacts.

Conclusion: There would be negligible to minor, short-term, adverse impacts to wildlife from the selected alternative around project areas due to temporary displacement during air operations. This would occur primarily from the use of helicopters, when they are landing or taking off, or flying at low-levels during census operations.

Individual bighorn sheep could be directly impacted from the management operations. In the long-term, bighorn sheep populations would benefit from efficient and science-based management. Effective management of exotic vegetation and overpopulations of burros could improve the ecological community and wildlife habitat.

No impairment would occur to wildlife, wildlife habitat, and sensitive species from the impacts associated with this alternative.

Natural Soundscapes

Law enforcement patrols: Law enforcement patrols would occur over wilderness areas at least twice a week, at an elevation of 800 to 1,000 feet above ground level, with occasional flights at 700 feet above ground level if the situation warrants. Depending on the size of extent of the wilderness areas, flights are only over each wilderness area for 15 to 30 minutes at a time, unless there are law enforcement issues in that area, or it is a special wilderness patrol, which could take one to two hours per area.

Human-generated noise from the fixed-wing Cessna utilized for law enforcement patrols would occur over wilderness areas. Since the flights are primarily at 800 to 1,000 feet above ground level, and are in specific wilderness areas for a short duration, and there is only one aircraft utilized for these purposes, the impact to the natural soundscape would be temporary, adverse, and minor.

Radio tower maintenance: One NPS radio tower is located within an area considered suitable for wilderness designation, near Mount Wilson. The others are located outside of wilderness

and access would also be outside of wilderness. There would be temporary adverse impacts to the natural soundscape in the Mount Wilson area due from accessing the radio tower site, and from the noise generated from taking off and landing since that is when the helicopter would be closest to ground level. The impacts to the natural soundscape would occur a minimum of two times per year, when scheduled radio maintenance is required. Flights also occur to conduct emergency maintenance activities on an unscheduled basis, but generally about two more times per year.

Wildlife monitoring and capture operations: Low level flights for censusing and capture operations would disrupt the natural soundscape of that particular project area. The duration of the flights would vary from 2 to 6 hours, creating temporary moderate impacts to the soundscape near project activities.

Flights would usually be scheduled during weekdays, avoiding weekends if possible, and would avoid periods of peak visitor use. Landing helicopters to secure and transport bighorn and burros would have temporary minor adverse impacts to the natural soundscapes in the immediate area. Impacts from aircraft noise would result in short-term, minor to moderate, localized, adverse impacts to the natural soundscapes.

Resource Management Activities: Utilizing a helicopter to sling-load supplies would occur on the first and last days of the project (2 days total). The helicopter may remain on site in case of medical emergency, but it would not be in operation unless necessary. The sling-load operation would create minor, temporary disturbance to the natural soundscape in the area, primarily when the helicopter takes off and lands. This would result in minor, temporary disturbances to the natural soundscape in the project area.

Operations on the Grand Canyon-Parashant NM

Law enforcement and resource monitoring patrols would occur occasionally throughout the Grand Canyon-Parashant NM.

Aerial operations and monitoring activities could temporarily alter the natural soundscapes in the vicinity of the flights, with the primary adverse impact resulting from low-level helicopter flights utilized for wildlife monitoring. This type of activity would occur infrequently, 2 to 4 days per year, with several hours spent flying over each area.

Wilderness monitoring would occur 2 to 3 times per year. Ponderosa pine monitoring would occur 1 to 2 days per year. Range activity monitoring would occur 4 to 5 days per year. Law enforcement flights would occur 2 to 3 times per year (BLM and NPS) and AGFD law enforcement flights occur 5 to 10 times per year, at various times, with the purpose of identifying violations of state law including illegal hunting and off-road driving. Other infrequent monitoring and law enforcement flights would utilize fixed-wing aircraft and are generally at or above 800 feet above ground level, which would create temporary, negligible to minor adverse impacts to the natural soundscape.

Cumulative Effects: The impacts of the proposed flights under the selected alternative, when considered with other existing and potential future aerial operations (private, air tours,

commercial flights, and military operations) would not result in significant additional cumulative adverse impacts. Management-related fixed-wing flights would occur at least twice a week, generally between 800 and 1,000 feet above ground level, with a varied route to cover the entire park when possible. Other operations, such as the use of project helicopters, are very infrequent, would occur in selected areas for short periods of time, and mitigation would be adopted to reduce the impacts to wilderness and visitors. Considering this, the proposed action would contribute negligibly to the cumulative impacts.

Conclusion: Under the selected alternative, there would be minor to moderate, short-term, adverse impacts on natural soundscapes in wilderness areas due to aerial operations. The impacts are considered minor to moderate because the noise generated from flight activities are detectable, but are infrequent and temporary. Cumulative impacts from current flights and air tours over Lake Mead NRA would continue to adversely impact park soundscapes, but the impacts from the operations proposed under this alternative would not add to this impact significantly. No impairment to natural soundscapes would occur from implementation of this alternative.

Visual Resources

Law Enforcement and Maintenance Activities: Short-term, negligible impacts to visual resources would occur during aerial law enforcement activities, since law enforcement-related fixed-wing flights would take place at or above 800 feet above ground level and would occur approximately twice per week, in different areas of the park. Radio tower maintenance activities would create short-term negligible impacts to visual resources since they would occur twice per year at each site.

Resource Management Activities: Resource management activities such as low-level helicopter use for transporting materials, monitoring, and census and animal removal projects could create temporary minor adverse impacts to the visual resources in the project areas during the period of the operation. The level of adverse impact depends upon the visitor's expectations of visual resources in and around the project sites. Impacts would be more noticeable in wilderness areas, where there are expectations of a pristine visual environment without human influence and objects.

Operations on the Grand Canyon-Parashant NM: Monitoring and law enforcement operations on the Grand Canyon-Parashant NM would utilize both fixed-wing airplanes and helicopters. The fixed-wing airplane utilized for law enforcement would generally fly at 800 feet above ground level or higher. Helicopters could fly at lower altitudes depending on the project work. Since these operations would occur only occasionally, for limited periods of time, the impact to the visual resources would be temporary, minor, and adverse.

Cumulative Effects: The observation of low-flying aircraft associated with air tours can detract from the viewshed and create temporary negative impacts to park visual resources. The additive impacts from the proposed management-related aerial operations under this alternative would be temporary and occasional, would occur during project and law enforcement work

only, and would be restricted to project areas or at or above certain altitudes. Therefore, the selected alternative would contribute negligibly to the cumulative impacts.

Conclusion: Implementation of the selected alternative would result in short-term, negligible to minor impacts to visual resources due to the observation of low-flying aircraft, particularly in wilderness.

Visitor Experience

Visitors to wilderness areas generally expect quiet and solitude, devoid of artificial noise and non-natural objects. Much of the visitor experience in wilderness depends upon their expectations of the natural soundscapes and visual resources, as discussed above.

Law Enforcement and Maintenance Activities: There could be short-term adverse minor impacts to the visitor experience, particularly in wilderness areas, from the presence and sound of airplanes and helicopters. Ongoing maintenance to park radio towers would assure quick law enforcement response and more effective search and rescue operations. Law enforcement flights would allow park rangers to more effectively determine problem areas and areas where visitor assistance is needed. This would benefit the park visitor.

Resource Management Activities: During project flights, visitors near the project area would be impacted from sound and visual intrusions. This would result in short-term, adverse impacts to visitor experience in a wilderness area. Visitors would be impacted as little as a few minutes, or as much as several hours at a time for several days, depending on where they are and the schedule of the management activities.

Visitors could experience beneficial impacts in the long-term from the successful implementation of resource management and visitor protection activities. Restoring the wilderness to natural conditions, and maintaining native wildlife populations, can improve the visitor experience. Closing and rehabilitating mine sites could reduce visitor hazards.

Operations on the Grand Canyon-Parashant NM: There would be short-term minor adverse impacts to visitors in wilderness areas on the monument due to the noise and presence of airplanes and helicopters. This would occur infrequently during monitoring and law enforcement activities. However, the visitor could benefit from law enforcement flights if they require assistance. Visitors could benefit from resource management activities as they would assure the wilderness resource is preserved and protected, and wildlife populations are maintained.

Cumulative Effects: Wilderness visitors at Lake Mead NRA are currently impacted by air tours and overflights. This impact would continue under the no-action alternative. The addition of aerial law enforcement patrols and helicopter use for project work would contribute negligibly to the cumulative impacts.

Conclusion: Visitors in wilderness areas where the project is occurring would experience short-term, minor to moderate adverse impacts due to the visual and noise impacts from low

flying aircraft in a backcountry area. Visitors could benefit from the continued maintenance of radio towers and from habitat restoration, wildlife management, and mine closures.

Safety

As with any aerial operation, there are inherent risks involved to participants. Mitigation measures and compliance with required policies serve to reduce the risks. However, the risks can not completely be eliminated. Therefore, there is the potential for injury and loss of human life during these operations. If this occurs, severe, irreversible adverse impacts would result to individuals involved in project work.

Beneficial impacts to visitors and employees would result from improved safety conditions from law enforcement patrols, radio communications, and mine closures.

Cumulative Effects: None.

Conclusion: Even with following required policies and safety mitigation, there could be severe, irreversible impacts to participants in the aerial operations. Visitors and park employees would benefit from improved conditions related to patrols, communications, and mine closures.

Wilderness

Wilderness impacts are associated with biophysical and experiential effects. Biophysical effects include the ecological health of the area, including wildlife. Experiential effects include opportunities for solitude, natural quiet, self-reliance and discovery. Natural quiet was addressed previously under “Soundscapes” and solitude was addressed under “Visitor Experience.”

Law Enforcement and Maintenance Activities: Law enforcement activities using fixed-wing aircraft at approximately 800 to 1,000 feet above ground level may temporarily detract from the experiential effects within wilderness areas during the period when the aircraft is flying above the wilderness area. This would create short-term minor adverse impacts to the wilderness resource. It could impact any wilderness area on any given day within the recreation area because law enforcement patrols occur on a parkwide basis and patrol areas change periodically. Generally patrols are only over selected areas for minutes at a time unless there is a law enforcement issue in the area, in which case the plane could circle the area for a period of 15 to 30 minutes or longer. Special wilderness patrols could take one to two hours per wilderness area.

Suitable wilderness around the Mount Wilson repeater would be impacted by helicopter use at least twice a year for scheduled radio tower and repeater maintenance, and may be impacted two or more times per year if emergency maintenance is required. Flights into the Mount Wilson area generally take approximately one hour each way, with 30 minutes of actual flying in suitable wilderness. There would be short-term, minor adverse impacts to the experiential wilderness resources.

Wildlife monitoring and capture operations: Landing helicopters to secure and transport bighorn and burros, supplies, and personnel would have temporary minor adverse impacts to the wilderness resource in the immediate area. Impacts from aircraft noise would result in short-term, minor to moderate, localized, adverse impacts to the wilderness resource.

Project operations using low level helicopters, such as monitoring, censusing, and capturing and removing animals, could create temporary, minor to moderate, adverse impacts to the wilderness experiential resource in the selected project areas. The duration of the flights within each project area varies from 2 to 6 hours, creating temporary moderate impacts to the wilderness resource near project activities.

Resource Management Activities: Allowing appropriate resource management activities within wilderness would preserve the ecological health of the bighorn sheep herd and restore the natural processes within Lake Mead NRA. These are important resources related to the preservation of the wilderness character within Lake Mead.

Utilizing a helicopter to sling-load supplies would occur on the first and last days of the project (2 days total). The helicopter may remain on site, staged outside of the wilderness area, in case of medical emergency, but it would not be in operation unless necessary. The sling-load operation would create minor, temporary disturbance to the wilderness resources in the area, primarily when the helicopter takes off and lands. This would result in minor, temporary disturbances to the project area.

Operations on the Grand Canyon-Parashant NM: Law enforcement and resource monitoring patrols would occur occasionally throughout the Grand Canyon-Parashant NM. Aerial operations and monitoring activities could temporarily alter the wilderness resource in the vicinity of the flights, with the primary adverse impact resulting from low-level helicopter flights utilized for wildlife monitoring. This type of activity would occur infrequently, 2 to 4 days per year, with several hours spent flying over each area.

Wilderness monitoring would occur 2 to 3 times per year. Ponderosa pine monitoring would occur 1 to 2 days per year. Range activity monitoring would occur 4 to 5 days per year. Law enforcement flights would occur 2 to 3 times per year (BLM and NPS) and AGFD law enforcement flights occur 5 to 10 times per year, at various times, with the purpose of identifying violations of state law including illegal hunting and off-road driving. Other infrequent monitoring and law enforcement flights would utilize fixed-wing aircraft and are generally at or above 800 feet above ground level, which would create temporary, negligible to minor adverse impacts to the natural soundscape.

Allowing appropriate resource management activities within wilderness would preserve the ecological health of the region and help to restore the natural processes within Grand Canyon-Parashant NM. These are important resources related to the preservation of the character of wilderness areas.

Cumulative Effects: As stated in the previous impact topics, the wilderness resources and visitors are currently being impacted by air tours and overflights. Cumulative impacts to wilderness resources from aircraft include minor to moderate adverse impacts from noise and visual disturbance, and reduced opportunity for solitude. Considering the frequency and number of existing and future potential air tours and overflights that occur within wilderness areas at Lake Mead NRA and Grand Canyon-Parashant NM, the selected alternative would contribute negligibly to the cumulative impacts.

Conclusion: Under this alternative, there would continue to be minor to moderate negative impacts to the wilderness resource and wilderness visitor from aircraft overflights. The ecological health of the wilderness areas would be preserved as resource management objectives in wilderness are accomplished. There would be no impairment to wilderness from the impacts associated with implementation of the selected alternative.

PUBLIC INVOLVEMENT AND CONSULTATION

Staff of Lake Mead NRA and resource professionals from Grand Canyon-Parashant National Monument conducted internal scoping and identified the likely issues and impact topics, and the relationship of the proposal to other planning and management within the recreation area. A press release initiating scoping and describing the proposal was provided to area newspapers on September 2004 to announce the 30-day scoping period. A single comment supporting the project but emphasizing the need for safety was received.

The environmental assessment was made available for public and agency review and comment during a 30-day period ending June 3, 2005. One hundred ninety letters announcing the availability of the document were mailed to individuals, businesses, and organizations on the recreation area's mailing list, and 60 of these parties received a copy of the EA. The document was provided to area libraries and was available for review on the park Web site, or interested parties could contact the park by phone or mail and request copies of the document.

Written comments were received from five agencies. NDOW expressed support for the preferred alternative. The Nevada State Clearinghouse expressed concern over increased overflights, a topic which will be addressed in an Air Tour Management Plan. The Phoenix office of the U.S. Fish and Wildlife Service recommended mitigation measures for the California condor which have been included in this document. The Kingman field office of the BLM requested clarification of the impacts that may be expected to the Mount Wilson Wilderness located adjacent to park lands. The BOR suggested edits and provided additional information on their activities within Lake Mead NRA.

DECISION RATIONALE

The impacts of the selected alternative to natural soundscapes, visual resources, wildlife, and visitor experiences are occasional and temporary. Although the use of helicopters and fixed-wing aircraft can cause disturbance to the aforementioned resources, these disturbances last for a short time only and do not cause any enduring effects once the aircraft have left the area. As noted in the EA, only some of the operations considered will occur in or near wilderness, and all of the operations are reduced as much as possible. The legislation which established the subject wilderness areas called for continuation of such critical management activities. Further, the minimal level of the activities associated with use of the aircraft is essential for protecting and enhancing the wilderness character of those areas. In addition, due to the critical nature and time-sensitive objectives of the necessary activities and the remoteness of the areas involved, aerial operations are viewed as the minimum tool capable of accomplishing the proposed actions (both in backcountry and wilderness). For these reasons, the NPS concludes that the selected alternative is appropriate for accomplishing the expressed purpose and need for federal action.

IMPAIRMENT OF PARK RESOURCES OR VALUES

The effects of the proposed operations will not impair park resources or values necessary to fulfill specific purposes identified in the park's enabling legislation. Impacts documented in the environmental assessment and summarized above will not affect resources or values key to the natural and cultural integrity of the park or alter opportunities for the enjoyment of the park. The proposed action will not impair park resources and will not violate the National Park Service Organic Act. This conclusion is based on a thorough analysis of the impacts described in the environmental assessment, and reflects the professional judgment of the decision-maker in accordance with *National Park Service Management Policies*, 2001.

CONCLUSION AND BASIS FOR DETERMINATION

Based on the analysis completed in the environmental assessment, the capability of the mitigation measures to reduce, avoid, or eliminate impacts, and with due consideration of public response, the National Park Service determined that the selected alternative does not constitute an action that normally requires the preparation of an environmental impact statement.

The selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. The selected alternative would provide for visitor and employee health and safety, protect sensitive resources, manage wildlife populations, and monitor, rehabilitate, and preserve wilderness resources set in the context of the laws, regulations, and policies governing park management. There are no significant impacts on wildlife, wildlife habitat, natural soundscapes, visual resources, visitor experience, safety and park operations, or wilderness.

There are no highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence identified. Implementation of the action would not violate any federal, state, or local environmental protection law. Therefore, in accordance with the National Environmental Policy Act of 1969, and regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement will not be prepared for this project and the selected action may be implemented as soon as practical.

Recommended:

William K. Dickinson
Superintendent, Lake Mead National Recreation Area

Date

Approved:

Jonathan B. Jarvis
Regional Director, Pacific West Region

Date